



COPENHAGEN RESEARCH FORUM VISIONS FOR
HORIZON 2020

Horizon 2020 **The Framework programme for Research and Innovation**

European Parliament
Committee on Industry, Research and Energy

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Copenhagen Research Forum
WWW.CRF2012.ORG

Brussels, Tuesday 20 March 2012



CRF: Horizon 2020 is a strong and visionary proposal for Europe

Excellence, Industry & Societal challenges



- **Health**
- **Food & Agriculture**
- **Energy**
- **Transport**
- **Climate & Resources**
- **Societies**



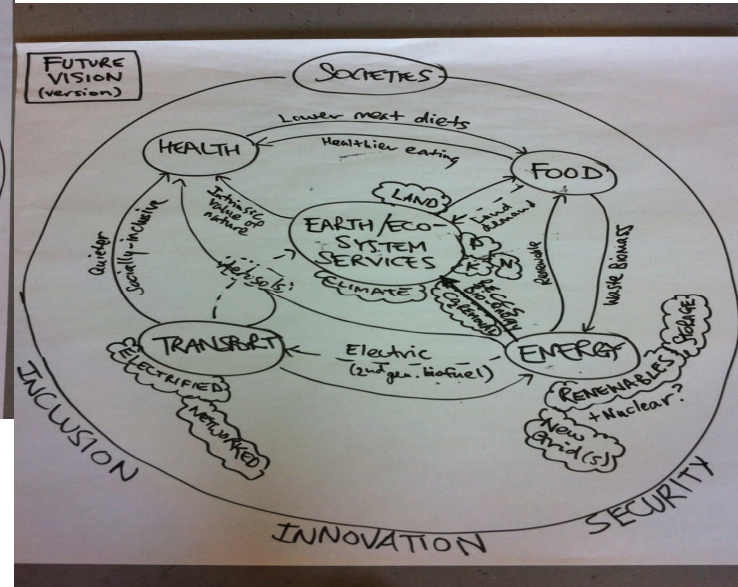
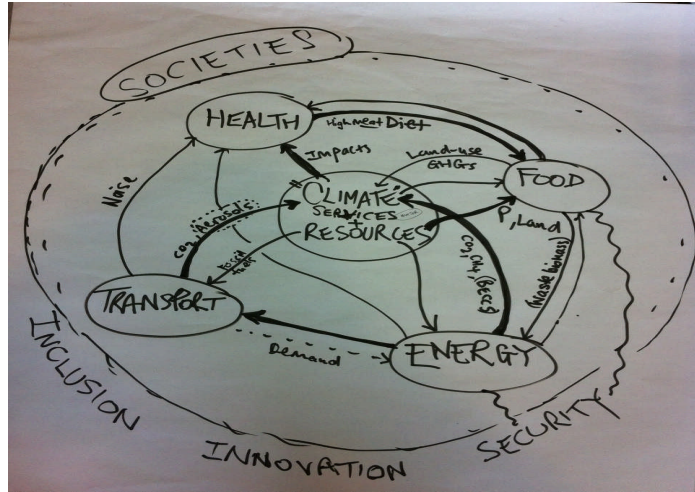
Copenhagen Research Forum



- Recommendations from the European science community on the six Societal Challenges
- Six Danish chairs appointed by partners + European chair
- 600 top researchers invited to the virtual forum, Nov. 2011
- 10-15 top researchers invited as panel members
- Conference 16 January 2012 – workshops and discussions
- Report and dissemination of recommendations



Interdisciplinarity is the main message



Europe has an aging population with obesity, cardiac and brain diseases, cancer, allergy, physical disabilities, chronic diseases, infertility, and infectious diseases – and rising health care costs.

- Personalised medicine – the revolution of modern medicine.
- Prevention - to create lifelong health.

Innovation for growth and wealth , investment return 39 % pa



Sustainable Outputs, Building innovative value chains, pro-active use of food promoting health and wellbeing. Holistic perspective using cross- cutting technologies

FOOD
SECURITY, SUSTAINABLE AGRICULTURE, MARINE
AND MARITIME RESEARCH AND THE BIO-ECONOMY






SECURE, CLEAN AND EFFICIENT ENERGY

Transition to a reliable, sustainable and competitive energy system during resource scarcity, energy needs and climate change. Match scale and complexity of energy challenge to make the transition in time.

- Refine SET Plan.
- Add new approach to calls for systemic and multidisciplinary research
- Ensure adequate funding and multiplier effect of other funds
- Expand and engage the knowledge base through University lead "Agoras" - to make ERA a vibrant knowledge ecosystem that breeds innovation.



The economic down turn and debt crisis will restrict infrastructure investments for many years

- strong sector competition for public spending

Overriding challenges

- Congestion due to overexploitation of system capacity - Smart
- Greenhouse gas emissions from transport's oil dependency - Green
- A modally divided and vulnerable transport system - Integrated

SMART, GREEN AND INTEGRATED
TRANSPORT

Vision: Humanity facing grand challenges requiring a grand transition of our societies; Position Europe on a prosperous sustainable path

- Position "Climate action, Resource efficiency and raw materials" in the context of global environmental change
- Anticipate change, risk analyses, recognise surprise
- Integrated approaches needed → a new research approach
- Values, ethics, equity
- Strengthen adaptation, resilience
- Land and Water critical issues
- Stronger emphasis on biodiversity
- Global outlook, Europe and its role in the world
- New frontiers of technologies (food/fisheries; energy solutions; water innovations; early warning systems)

CLIMATE
ACTION, RESOURCE EFFICIENCY
AND RAW MATERIALS



Well chosen focus. Creating innovative cultures.
Reinvent the welfare-state/social state and Recreate politics.
Divergence & diversity
Dual contribution of Social Sciences and Humanities.
Theory is needed, This is no time for business as usual
Epistemological pluralism
Adjust evaluation criteria and processes for multidisciplinary.

Innovation can be achieved by embedding the 'problem definition' with societal actors, citizens and communities – not pure top-down agenda of policy-makers and business elites.

SOCIETIES
INCLUSIVE, INNOVATIVE AND SECURE

Societies

Inclusive, innovative and secure societies

Transition to sustainable societies

Governance, economics, behavioral change, pilots/experiments, Regional Global Change models, Scaling Innovations

Health

Health, demographic change and wellbeing

Food

Food security, sustainable agriculture, marine and maritime research and the bio-economy

Energy

Secure, clean and efficient energy

Transport

Smart, green and integrated transport

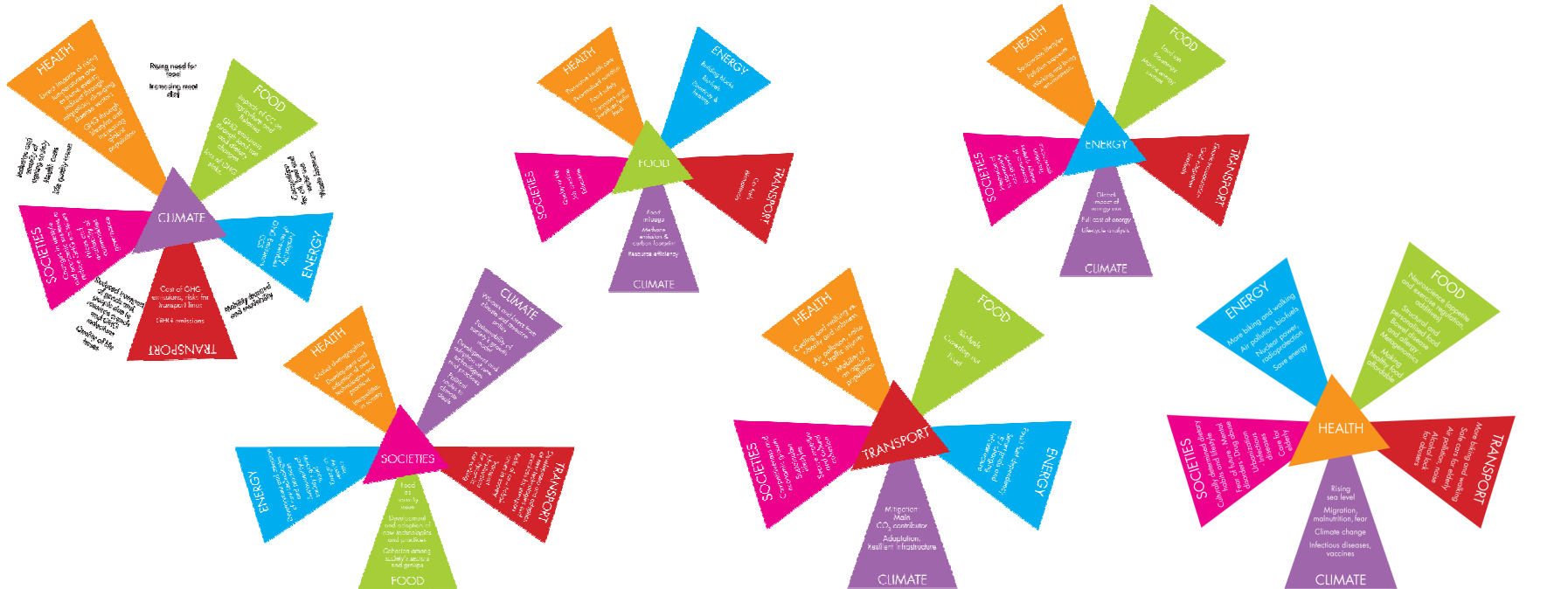
Climate

Climate action, resource efficiency and raw materials

Societies

Inclusive, innovative and secure societies

Cross-cutting message: Interdisciplinarity



Cross-cutting framework conditions



Excellence is a prerequisite for getting the best researchers involved

The proposed simplification of Horizon 2020 is essential

Calls need to be open

Global perspective



Feed back from Ministerial Conference about CRF report

The six societal challenges were the correct choices

The interdisciplinary approach was well received by many

From research to Partnerships , innovation and jobs – how to do it ?





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VISIONS FOR HORIZON 2020

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Europe needs to find solutions for growth, prosperity and safety.

A stronger Europe through better, stronger research.





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Research

Education

Innovation
& industry

Policy

